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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,411	04/15/2004	Tetsuyo Ohashi	03500.018074	6468
5514	7590	06/03/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			CULLER, JILL E	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2854	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,411

Applicant(s)

OHASHI ET AL.

Examiner

Jill E. Culler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20040503.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 40, 43 and 49.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 301.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 11-14 are objected to because of the following informalities: In claim 11, on line 29, the word "through" between "passes" and "between" appears to be unnecessary. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent No. 6,332,068 to Blackman et al. in view of U.S. Patent No. 5,808,647 to Kurata et al.

With respect to claims 1-2 and 6, Blackman et al. teaches a both-side recording apparatus with a sheet transport mechanism having a sheet transport roller, 60, and a pinch roller, 70, pressed against the sheet transport roller wherein a recording medium can be transported to a printing position and then transported to a paper inversion unit, see column 4, lines 47-64, and wherein the recording is performed to the recording paper by inkjet recording means, 12, for discharging ink from a discharge port. See column 3, line 66 - column 4, line 1.

Blackman et al. does not teach a sheet discharge roller arranged on the downstream side of the sheet transport roller in a transport direction, and a rotating body pressed against the sheet discharge roller, characterized in that a recording medium can be transported to a position where a rear end of the recording medium is released from the sheet transport roller when a first surface is recorded at first, and then the recording paper is transported to a paper inversion unit in such a manner that the sheet transport roller and the pinch roller are released to transport the recording

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medium toward a reverse direction of the first surface recording by the sheet discharge roller, and then the pinch roller is pressed into contact with the sheet transport roller again to further continue the transport in the reverse direction, wherein a gap between the sheet transport roller and the pinch roller is set larger than an amount of deformation of the recording medium after the first surface of the recording medium is recorded.

Kurata et al. teaches a recording apparatus having a sheet transport mechanism having a sheet transport roller, 4a, and a pinch roller, 4b, pressed against the sheet transport roller and a sheet discharge roller, 4c, arranged on the downstream side of the sheet transport roller in a transport direction, and a rotating body, 4d, pressed against the sheet discharge roller, characterized in that a recording medium can be transported to a position where a rear end of the recording medium is released from the sheet transport roller, and can be transported in such a manner that the sheet transport roller and the pinch roller are released to transport the recording medium toward a reverse direction of the first surface recording by the sheet discharge roller, and then the pinch roller can be pressed into contact with the sheet transport roller again to further continue the transport in the reverse direction, wherein a gap between the sheet transport roller and the pinch roller is set larger than an amount of deformation of the recording medium after the first surface of the recording medium is recorded. See column 4, lines 14-31 and column 7, line 31 - column 9, line 26 and Figure 10 in particular.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of Blackman et al. to use the transport and

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discharge roller arrangement of Kurata et al. in order to be able to more precisely move the recording medium through the printing apparatus.

Claims 3-5 and 7-10 are rejected with claims 1-2 and 6 as they contain functional language and do not define sufficient structure to patentably distinguish the claimed invention.

With respect to claim 11, Blackman et al. teaches a recording apparatus including: a first transport roller, 60, which transports a sheet of a recording medium toward a predetermined transport direction; a pinch roller, 70, which cooperates with the first transport roller to support the sheet while sandwiching the sheet; see column 4, lines 47-64, an inversion means, 22, which inverts the sheet transported by the first transport roller toward the direction opposite to the transport direction and transports the sheet to the first transport roller, and recording means, 12, for using a recording head discharging ink on the downstream side of the first transport roller in the transport direction to perform the recording to the sheet transported by the first transport roller. See column 3, line 66 - column 4, line 1.

Blackman et al. does not teach a second transport roller which transports the sheet on the downstream side of the recording means in the transport direction; a rotating body which cooperates with the second transport roller to support the sheet while sandwiching the sheet; characterized in that the recording is performed by the recording means while a rear end of the sheet is located on the downstream side of a nip portion of the first transport roller and the pinch roller, the sheet can be transported in the reverse direction of the transport direction by the second transport roller until the

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rear end of the sheet passes through between the first transport roller and the pinch roller while the first transport roller and the pinch roller are released, and then the first transport roller and the pinch roller can support the sheet while sandwiching the sheet and transport the sheet to the inversion means.

Kurata et al. teaches a recording apparatus having a sheet transport mechanism having first transport roller, 4a, and a pinch roller, 4b, pressed against the sheet transport roller and a second transport roller, 4c, which transports the sheet on the downstream side of the recording means in the transport direction; a rotating body, 4d, which cooperates with the second transport roller to support the sheet while sandwiching the sheet; characterized in that the recording is performed by the recording means while a rear end of the sheet is located on the downstream side of a nip portion of the first transport roller and the pinch roller, the sheet can be transported in the reverse direction of the transport direction by the second transport roller until the rear end of the sheet passes through between the first transport roller and the pinch roller while the first transport roller and the pinch roller are released, and then the first transport roller and the pinch roller can support the sheet while sandwiching the sheet and transport the sheet to the inversion means. See column 4, lines 14-31 and column 7, line 31 - column 9, line 26 and Figure 10 in particular.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of Blackman et al. to use the transport and discharge roller arrangement of Kurata et al. in order to be able to more precisely move the recording medium through the printing apparatus.

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Claims 12-14 are rejected with claim 11 as they contain functional language and do not do not define sufficient structure to patentably distinguish the claimed invention.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 3,942,785 to Stange, U.S. Patent No. 5,415,391 to Wong et al., U.S. Patent No. 5,984,305 to Inoue, U.S. Patent No. 5,988,635 to Ohshima, U.S. Patent No. 6,343,787 to Kato et al., and U.S. Patent No. 6,550,907 to Uchida each teach an apparatus having obvious similarities to the claimed subject matter.

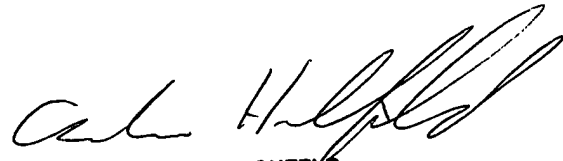
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-Th 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ANDREW H. HIRSHFELD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800